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I have not read
Ref: 1305-OD-129

17 June 1965

[Redacted]
Post Office Box 9474
Rosslyn Station
Arlington, Virginia 22209

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Subject: [Redacted] Project SC-1305
Progress Report, May/June 1965

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Gentlemen,

Enclosed are four (4) copies of [Redacted] Progress
Report on Project SC-1305 for the period May/June 1965.

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Very truly yours,

[Redacted Signature]

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Vice President - Marketing

RJL/de

Enc: (4) P.R. - 2 pp.

Cert. #743884

PROGRESS REPORT
For
AUTOMATIC STEREO CORRELATOR
SC 1305

**"Construction of Breadboard System of an Automatic
Stereo Correlator and Evaluation of the Performance Capabilities
of such a System."**

Period Covered: May - June 1965
Date: 16 June 1965
Job No.: SC 1305
Document No.: OD-127

This is the tenth monthly progress report.

TASK OBJECTIVE

To manufacture a breadboard and to conduct sufficient tests to determine the performance capabilities inherent in a system of automatic stereo correlation as described in the 552 MSC proposal.

CURRENT STATUS OF WORK

1) The error channel selector switch has been improved to allow handling of signals with amplitude ratios of as high as 80:1. It was felt that the wide range of signal amplitudes encountered in multi channel operation was a contributor to the difficulty in tracking with several correction axes operating.

2) It was found that due to instrumentation faults that the outputs of the AD03 differential amplifiers were set off null by as much as 4 millivolts and that the d-c balance trimmer potentiometers in the circuits were unstable. Both of these difficulties could cause drift off the image in the absence of a signal stronger than 4 millivolts.

3) Improvements in the symmetry and common mode rejection of the main common channel difference amplifier were made.

4) Plans have been made for conducting a test using fiber optic cable and an image enhancer.

5) Correlation tests have been started.

PROBLEM AREAS ENCOUNTERED

1) Some difficulty has been encountered in adjusting slit positions so as to get properly phased error signals when several axes are operating. The solution lies in time consuming adjustment.

2) The malfunction of the intensity control circuit mentioned in the previous report has not been corrected in order to avoid delaying correlation tests.

3) In order not to delay correlation tests, the second pair of error detecting slits for each channel has not been adjusted. The proper adjustment of these with respect to the first pair is anticipated as being time consuming.

DOCUMENTATION OF VERBAL COMMITMENTS AND/OR AGREEMENTS

None have been made.

PROJECTED WORK FOR NEXT PERIOD

- 1) Complete adjustments described in Problem Area 1).
- 2) Additional quantitative tests with simple targets.
- 3) Tests with photographic images.
- 4) Install and test performance with fiber optic cable and image enhancer.